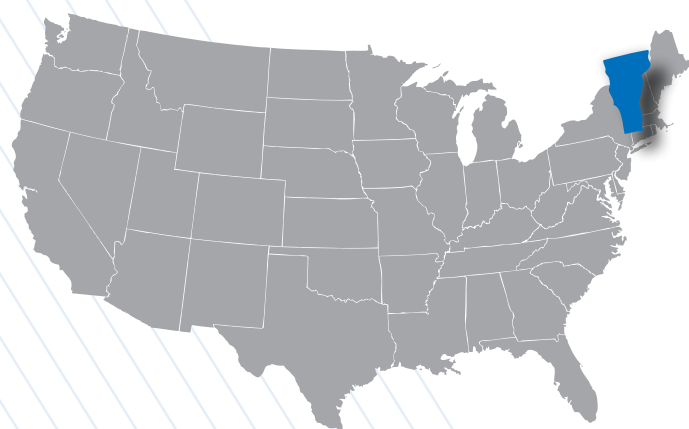


## Vermont Manufacturing Extension Center

The Vermont Manufacturing Extension Center (VMEC) has operated statewide as a not for profit Center since 1995. VMEC helps improve and grow manufacturing in Vermont and strengthen the global competitiveness of the state's smaller manufacturers. VMEC leverages private and public partnerships and provides hands-on implementation assistance, consulting, training and coaching. The goal is to help Vermont manufacturers achieve sustainable and profitable growth through innovation, increased productivity, improved manufacturing and business processes and the adoption of advanced "Next Generation Manufacturing" business practices and attributes, all leading to the creation and retention of high wage manufacturing jobs.

VMEC has a statewide staff of Professional Manufacturing Advisors, Growth Coaches and Innovation Black Belts who are very experienced in implementing cost effective process improvements and company/organization innovation and profitable growth strategies. Additionally, one Advisor specializes in Information Technologies, including software selection and system implementations.



## For more information, contact

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## Vermont MEP CLIENT IMPACTS

*Impacts are based on clients receiving service in FY2012*

Total Increased/  
Retained Sales



**\$97.5 Million**

Total Increased/  
Retained Jobs



**217**

New Client  
Investments



**\$5.87 Million**

# CLIENT SUCCESS: VERMONT CIRCUITS

*“Due to the implementation of the actions suggested by VMEC, our manufacturing process is less congested, more efficient, and provides a better atmosphere to concentrate value added tasks.”*

Cheryl Bedard , Executive Vice President

## Valuable Results for High Tech Circuit Board Manufacturer

Vermont Circuits, based in Brattleboro, Vermont, was established in 1989. They operate in a 32,000 sq. ft. facility with a workforce of 80 operating on four shifts. The company has held their ISO 9000 registration since 1993 and is certified to AS 9100/C and MIL-P-31032. Products include high tech, high reliability circuit boards for the aerospace industry, medical field and the United States Department of Homeland Security.

### *Situation:*

Vermont Circuits had several accomplishments in the lean manufacturing realm after many of their employees had taken a Lean Manufacturing 101 workshop offered by the Vermont Manufacturing Extension Center (VMC), a NIST MEP affiliate. Being a qualifying company for Vermont state funding, they pursued taking the necessary steps to get more involved in lean manufacturing, concentrating in the product and stream line process areas. The company was experiencing bottlenecks in the process areas. Growth spurts are sporadic, as the product is made-to-order by the company and standard lead time is four weeks. VMEC was called in to help resolve some production issues.

### *Solution:*

After a full factory inspection to identify where best to implement the Value Stream Mapping process, VMEC suggested two areas (mechanical and inspection). These were chosen as they experienced the most bottlenecks on the factory floor. Concentration on streamlining operators in both areas, purchase of new equipment in the mechanical area and a revised floor plan layout of both areas made for a smoother product flow. Also, purchasing many smaller items, such as hand tools, for each employee in both areas, made the flow that much more effective. The company also started developing 5S (sort, set in order, shine, standardize, sustain) functions in different departments.

### *Results:*

- \* Increased throughput by 7%
- \* Reduced paperwork and set-up times
- \* Minimized non-value added process time
- \* Improved productivity

## Improved Productivity

2013